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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,755

03/31/2004

Mark Feldman

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26389

7590

09/07/2006

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EXAMINER

CONNOLLY, PATRICK J

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,755

Applicant(s)

FELDMAN, MARK

Examiner

Patrick J. Connolly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 20 and 22 is/are rejected.
- 7) ☒ Claim(s) 9-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07.06.2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 22 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Merely determining at least one signal ratio based on at least the first and second detection signal would not appear to be sufficient to constitute a tangible result, since the outcome of the determining step has not been used in a disclosed practical application nor made available in such a manner that its usefulness in a disclosed practical application can be realized. See OG Notices: 22 November 2005, "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility".

See part b. *Practical Application the Produces a Useful, Concrete, and Tangible Result* under Section IV *Determine Whether the Claimed Invention Complies with the Subject Matter Eligibility Requirement of 35 U.S.C. Sec. 101*, sentence 3, in the OG Notice from 22 November 2005 states ‘In determining whether the claim is for a “practical application,” the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather that the final result achieved by the claimed invention is “useful, tangible, and concrete.”’

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

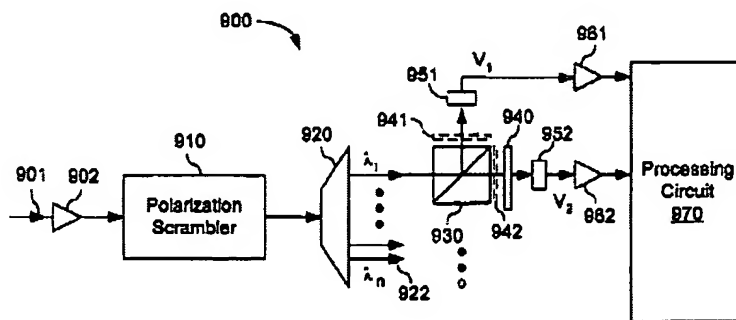
A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-8, 20 and 21 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent Application No. 2005/0201751 to Yao (hereafter Yao).

As to claims 1 and 21, Yao discloses a system for determining wavelength related characteristics of a radiation from a radiation source including (see Figure 9 below, also paragraphs [0044]-[0048]):

FIG. 9

a first wavelength-dependent optical element located along a first optical path (940);

a first optical power-measuring detector located along the first optical path after the wavelength-dependent optical element to receive radiation transmitted along the first optical path (952); and

a first linear polarizer (942) located along the first optical path before the first optical power-measuring detector, wherein:

the radiation transmitted along the first optical path is incident on at least one polarization-sensitive surface located along the first optical path before being received by the

first optical power-measuring detector, and the first linear polarizer is located such that the radiation received by the first optical power-measuring detector has been linearly polarized by the first linear polarizer.

As to claim 2, Yao discloses a bandpass filter (940).

As to claim 4, Yao discloses a first beam-dividing element located before the first wavelength-dependent optical element along the first optical path (930); and a second optical power-measuring detector (951) located after the beam dividing element along a second optical path to receive radiation transmitted along the second optical path, wherein the first beam dividing element receives radiation from the radiation source and transmits a first portion of the radiation along the first optical path and a second portion of the radiation along the second optical path.

As to claim 5, Yao discloses a beamsplitter that is partially transmissive and partially reflective (930).

As to claim 6, Yao discloses both polarizers as discussed above, but also discloses a polarizing beamsplitter (see paragraph [0044]).

As to claim 7, Yao discloses the radiation received by the first optical power-measuring detector is filtered by the first wavelength-dependent optical element, and the radiation measurement device provides first and second signals from the first and second optical power-measuring detectors, respectively, wherein a signal ratio based on at least the first and second signals is usable to determine the wavelength-related characteristic of the radiation from the radiation source and the signal ratio is insensitive to variations in a polarization orientation of the radiation from the radiation source (see equation 12, paragraphs [0057] and [0058]).

As to claim 8, Yao discloses a signal processing circuit (970) which receives the first and second signals from the first and second optical power-measuring detectors, respectively, and determines the signal ratio based on the first and second signals, wherein the signal ratio is indicative of at least one of a radiation wavelength and a radiation frequency of the radiation from the radiation source (see discussion of power imbalance factors in paragraph [0062]).

As to claim 20, Yao discloses an embodiment with the polarizer before the beamsplitting element (see Figure 18B).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yao as applied to claims 1, 2, 4-8 and 20 above.

As to claim 3, Yao does not teach combining the polarization sensitive surface with the wavelength dependent optical element.

The Examiner takes Official Notice of the fact that it is well known to combine polarizing elements with wavelength or bandpass filters in wavelength detecting applications and systems by means of films or coatings because a more compact optical element can be provided and thereby space can be saved in the device.

It would have been obvious to one of ordinary skill in the art at the time of invention to include a combination polarizer and filter element in order to save space in the wavemeter.

Allowable Subject Matter

Claims 9-19 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With further regard to claim 22, the issues with regard to non-statutory subject matter as described above would have to be overcome by means of amendment.

The following is a statement of reasons for the indication of allowable subject matter:

As to claim 9, the prior art of record, taken alone or in combination, fails to disclose or render obvious a radiation measuring device for determining a wavelength-related characteristic of radiation from a radiation source including: a second wavelength-dependent optical element located along the second path after the first beam dividing element and before the second optical power-measuring detector, in combination with the rest of the limitations of claim 9.

Claims 10-19 are objected to by virtue of their dependence on claim 9.

As to claim 22, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method of determining a wavelength-related characteristic of radiation from a radiation source including: receiving the second beam along the second optical path with the wavelength-dependent optical element and outputting a second filtered beam along the second optical path; receiving the second filtered beam output by the wavelength-dependent optical element with a second optical power-measuring detector located along the second optical path, in combination with the rest of the limitations of claim 22.

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"Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the **next reply** after the Office action in which the well known statement was made."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Connolly whose telephone number is 571.272.2412. The examiner can normally be reached on 9:00 am - 7:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571.272.2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Patrick Connolly 08.29.2006